

REMARKS/ARGUMENTS

Applicants thank the Examiner for his careful review of this application. Claims 1-22 have been rejected. Claims 1, 13, 19, and 20 have been amended. Applicants respectfully request reconsideration of the application in view of the following amendment and remarks submitted in support thereof.

Obviousness Rejections under 35 U.S.C. §103(a)

Claims 1-12 and 14 stand rejected under 35 U.S.C. §103(a) as being unpatentable over U.S. Patent No. 6,172,990 to Deb et al. in view of U.S. Patent No. 5,909,564 to Alexander et al. As will be fully explained below, the combination of Deb et al. in view of Alexander et al. does not raise a *prima facie* case of obviousness against independent claims 1 and 13.

Although the Applicants believe that the original pending claims are defined over the art of record, the Applicants have amended the original independent claims to clarify the claims. Amended independent claim 1 defines a method for processing storage data that is to be communicated over a network. Storage data is provided to be transmitted over a network and the storage data is serialized using storage encapsulation protocol (SEP) headers to generate serialized storage data. Thereafter, the serialized storage data is encapsulated with a simple transport protocol (STP) to generate simple transport protocol data segments of the storage data. Each of the simple transport protocol data segments is then encapsulated into Ethernet frames. Similarly, amended independent claim 13 defines attaching SEP headers to selected portions of data and attaching STP headers to the selected portions having SEP headers to produce STP packets. The STP packets are then encapsulated into Ethernet frames for communication over the Ethernet network.

In response to the Applicants' request for reconsideration mailed June 16, 2004, the Examiner noted that Deb et al. teach the SEP header and STP header (see Advisory Action mailed August 5, 2004 at page 2). Again, the Applicants respectfully traverse the Examiner's characterization of Deb et al. relative to independent claims 1 and 13 because, as discussed previously, the SEP header and STP defined in independent claims 1 and 13 are simply not disclosed anywhere in the entire specification, and the headers and protocols disclosed in Deb et al. are not and do not function like the SEP header and the STP.

Furthermore, in support of the 35 U.S.C. §103(a) rejection, the Examiner also noted that Deb et al. disclose providing storage data to be transmitted over a network, as defined in independent claim 1. Applicants respectfully traverse the Examiner's characterization of Deb et al. because the portions of the reference relied upon by the Examiner (Figure 2A packet buffer; col. 24, lines 50-60; and col. 4, lines 27-45) do not teach or suggest providing storage data to be transmitted over a network. Specifically, column 24, lines 50-60 is merely a standard clause included in many applications that discloses that the "invention can also be embodied as computer readable code on a computer readable medium." Such standard clause has no relevance to the provision of storage data transmitted over a network.

Additionally, column 4, lines 27-33 discloses "a packet data processor for parsing received packet data." In contrast, independent claim 1 defines providing storage data to be transmitted over a network. Packet data is simply not storage data. Furthermore, the packet buffer in Figure 2A referred to by the Examiner is "for storing appropriate packets" (col. 10, line 22). Again, packets are not storage data. As Deb et al. disclose operating on packet data, Deb et al. cannot reasonably be considered to teach or suggest providing storage data to be transmitted over a network, as defined in independent claim 1.

The Examiner also noted that Alexander et al. disclose serializing the storage data using SEP headers or attaching SEP headers to selected portions of the data, as defined in independent claims 1 and 13. Applicants respectfully traverse the Examiner's characterization of Alexander et al. because the portions of the reference relied upon by the Examiner (col. 1, lines 46-52 and col. 3, lines 58-65) do not teach or suggest serializing the storage data using SEP headers or attaching SEP headers to selected portions of the data. In particular, Alexander et al. disclose a "PISO Shift Register 42 which accepts parallel 32-bit data words from the Transmit Buffer FIFO 40 and converts them to a 1-bit serial data stream" (col. 3, lines 59-61). Thus, as also noted by the Examiner, Alexander et al. disclose a simple conversion of parallel data to serial data. In contrast, independent claims 1 and 13 define serializing the storage data using SEP headers or attaching SEP headers to selected portions of the data. Alexander et al. do not disclose anywhere the conversion of data using SEP headers. Accordingly, Alexander et al. cannot reasonably be considered to teach or suggest serializing the storage data using SEP headers or attaching SEP headers to selected portions of the data, as defined in independent claims 1 and 13.

Further, in support of the 35 U.S.C. §103(a) rejection, the Examiner additionally noted that Deb et al. disclose encapsulating each of the STP data segments into Ethernet frames, as defined in independent claims 1 and 13. Applicants respectfully traverse the Examiner's characterization of Deb et al. because the portions of the reference relied upon by the Examiner (col. 11, lines 44-51 and col. 21, lines 15-20) do not teach or suggest encapsulating each of the STP data segments into Ethernet frames. Specifically, Deb et al. disclose that "micro-RISC stream processor 114a is preferably well suited to ... convert Ethernet packets into ATM cells" (col. 21, lines 15-19). Accordingly, the portions of the reference relied upon by the Examiner simply disclose converting Ethernet packets into ATM

cells. In contrast, independent claims 1 and 13 define encapsulating each of the STP data segments into Ethernet frames. As Deb et al. simply disclose converting data into Ethernet packets, Deb et al. cannot reasonably be considered to teach or suggest encapsulating each of the STP data segments into Ethernet frames, as defined in independent claims 1 and 13.

To establish a *prima facie* case of obviousness, the prior art references must teach or suggest all the claim limitations (see M.P.E.P. §2143). Here, in view of the incorrect characterization of Deb et al., the references as combined do not teach or suggest all the features of the claimed invention.

Additionally, to establish a *prima facie* case of obviousness based on a combination of references, there must be some suggestion or motivation, either in the references or in the knowledge generally available to one having ordinary skill in the art, to combine the references in the manner proposed. Here, the teachings of Deb et al. focus on “a high speed media access control layer micro-Risc engine that is user programmable to process packet data in-line while streaming packets in or out of the media access control layer core” (col. 6, lines 18-21). In contrast, the teachings of Alexander et al. relate to an Ethernet switch. A high speed media access control layer micro-Risc engine and Ethernet switching relate to entirely different technologies and applications. As the teachings of Alexander et al. have nothing to do with the problems addressed by Deb et al., Applicants submit that there would not have been any motivation for one having ordinary skill in the art to combine Deb et al. and Alexander et al. in the manner proposed by the Examiner.

Accordingly, for the above-stated reasons, Applicants submit that amended independent claims 1 and 13 are patentable under 35 U.S.C. §103(a) over Deb et al. in view of Alexander et al.. Claims 2-12 and 14, each of which depends directly or indirectly from independent claims 1 and 13, are likewise patentable under 35 U.S.C. §103(a) over Deb et al.

in view of Alexander et al. for at least the same reasons set forth for independent claims 1 and 13. As a result, Applicants respectfully request the Examiner to withdraw the 35 U.S.C. §103(a) rejection for claims 1-12 and 14.

Anticipation Rejections under 35 U.S.C. §102(e)

The Examiner has rejected claims 13 and 15-22 under 35 U.S.C. 102(e) as being anticipated by Deb et al. For the reasons put forth below, Applicants respectfully assert that Deb et al. fail to identically disclose each and every feature defined in independent claims 13, 19, and 20.

Amended independent claim 13 defines providing data having a peripheral device protocol format. In support of the 35 U.S.C. §103(a) rejection, the Examiner noted that Deb et al. disclose providing data having a peripheral device protocol format. Applicants respectfully traverse the Examiner's characterization of Deb et al. because the portions of the reference relied upon by the Examiner (col. 1, lines 39-51) do not teach providing data having a peripheral device protocol format. Specifically, column 1, lines 39-51 simply disclose that "there is a wide variety of standard compliant Ethernet products" and that "[b]y way of example, these networking products are typically integrated into networked computers, network interface cards (NICs), SNMP/RMON probes, routers, switching hubs, bridges and repeaters." Such exemplary disclosure of Ethernet products simply have no relevance to providing data having a peripheral device protocol format. Accordingly, Deb et al. cannot reasonably be considered to teach providing data having a peripheral device protocol format, as defined in independent claim 13.

Amended independent claim 19 defines providing data having a virtual interface format. In support of the 35 U.S.C. §103(a) rejection, the Examiner noted that Deb et al.

disclose a “Virtual Interface transfer” and providing data having a virtual interface format (see Final Office Action mailed April 16, 2004 at page 8). Applicants again respectfully traverse the Examiner’s characterization of Deb et al. because the portions of the reference relied upon by the Examiner (col. 2, lines 37-40 and col. 20, lines 30-36) do not teach providing data having a virtual interface format. Specifically, column 2, lines 37-40 merely discloses “a diagrammatic representation of typical Ethernet packets used for transferring data across a network,” and column 20, lines 30-36 discloses an Internet Protocol (IP), an Internet Packet Exchange (IPX) protocol, a Transmission Control Protocol (TCP), an User Datagram Protocol (UDP), and a Simple Mail Transfer Protocol (SMTP). The above-referenced portions and protocols do not teach a virtual interface format, as defined in independent claim 19. In fact, Deb et al. do not disclose anywhere in the specification the term “virtual interface.” Accordingly, Deb et al. cannot reasonably be considered to teach providing data having a virtual interface format, as defined in independent claim 19.

Finally, as discussed above and in the response mailed June 16, 2004, Deb et al. cannot reasonably be considered to teach attaching STP headers and encapsulating the STP packets into Ethernet frames for communication over the network, as defined in amended independent claims 13, 19, and 20. As Deb et al. fail to teach each and every element of the claimed invention, the Applicants respectfully submit that amended independent claims 13, 19, and 20 are patentable under 35 U.S.C. § 102(e) over Deb et al. Further, dependent claims 15-18 and 21-22, each of which directly or indirectly depends from amended independent claims 13, 19, and 20 are submitted to be patentable under 35 U.S.C. § 102(e) over Deb et al. for the reasons set forth above. Accordingly, Applicants respectfully request the Examiner to withdraw the 35 U.S.C. § 102(e) rejections for claims 13 and 15-22.

Conclusion

In view of the foregoing, the Applicants respectfully submit that all pending claims 1-22 are in condition for allowance. Accordingly, a Notice of Allowance is respectfully requested. If the Examiner has any questions concerning the present amendment, the Examiner is requested to contact the undersigned at (408) 749-6900 ext. 6924. If any additional fees are due in connection with filing this request, the Commissioner is also authorized to charge Deposit Account No. 50-0805 (Order No. ADAPP085B). A duplicate copy of the transmittal is enclosed for this purpose.

Respectfully submitted,
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